

Transformation in the French Air Force in an Era of Change

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THE FRENCH AIR FORCE, like all defense organizations, will of course take into account the changes of our military strategy reflected in the release of the White Paper of 17 June 2008.¹ By implementing the various reforms directed in that document, it will thus continue to transform.

But what exactly do we mean by *transformation*? Why employ this term when, as our history shows, the Air Force has not ceased evolving since its creation? For example, the Air Force of 1945 did not resemble in any way that of 1939. It had barely reconstituted its fleet of propeller-driven planes after the world war when it found itself passing into the jet era. At the beginning of the 1960s, it was engaged in the last colonial conflict using old, propeller-driven fighter planes; two years later, however, it fielded strategic bombers at the leading edge of technology that were designed to penetrate the densest air defenses. Its focus was on Eastern Europe and halting the anticipated waves of Soviet armored formations during the Cold War, but it was also engaged in Africa, containing the expansionist inclinations of various state and nonstate actors.

Things were never simple. We depended in 1945 on the good will of our allies for all that related to our equipment, because the French aircraft

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industry had practically disappeared in the war. To characterize the 1960s, I recommend the very instructive book by Gen Michel Forget, *From the Vampire to the Mirage: The Epic of a Generation of Fighter Pilots*, which relates how long and difficult was the process of integrating into our forces legendary planes like the Mirage IIIC. Finally, I will cite the drawdown of our major commands since the first Gulf War, which has resulted in the continual reduction in the sizes of staffs and has required our personnel to redesign their organizations and work processes continually.

I believe that the characteristic of our time is that today, unlike other periods, change now touches every field. Technological advances were certainly significant during the Cold War, but the geopolitical situation was fixed. After the Gulf War, we reconsidered our organizations by introducing the concepts of operational and organic command, but we employed the same equipment as in the 1980s, like the Transall, the Mirage F-1 and 2000, and the Jaguar. There were fields in which a certain continuity remained, in which an experiment prevailed, and in which reference marks could be transmitted.

Today everything changes, whether it is in the technical, organizational, or human domain. This is why we started this vast process we call transformation, which touches all aspects of our Air Force and which is intended to transform our capabilities to fulfill our missions in exhaustive and coherent ways. In other words, transformation is not an end in itself. It is a road which we travel that must allow us to apprehend the new strategic givens, the technological advances, and the new processes implemented in government to give to all aviators the most effective possible means of accomplishing their assigned missions.

To the great merit of the Air Force, our leaders anticipated the need for and organization like the *Centre d'études stratégiques aérospatiales (CESA)*.² We have advanced now for several years in the right direction, even if I say so myself, and the benefits of these reforms will slowly emerge on the surface. The main trends of the current transformation are well known. To face the widening of our missions while preserving our operational, technical, and psychological superiority, we must acquire general-purpose, leading-edge technologies. We must also open and simplify our structures to be able to concentrate our efforts to work in collaboration with the other actors in the defense ministry or in other government organizations taking part in one way or another to achieve our common mission.

Especially, transformation is accomplished through the constant attention of our people. The first responsibility for a military chief is to give to his men the means of carrying out the missions with which he charges them. This can involve difficult decisions. Taking into account the limited size of our budget and the need for modernizing our equipment, we can no longer maintain the generous human resource policies of the past. We must begin by reconsidering the number of aviators in the Air Force.

An image often associated with the law of diminishing returns, as described by the physiocrats in the eighteenth century, can help us better understand this approach. Imagine a field with fixed dimensions on which a farmer works. The farmer will work the ground and will draw from it the benefit of his labor. If you add another workman, the benefit will, of course, be higher. It will be the same if a third workman comes to help them, then a fourth, and so forth. Nevertheless, the time will come when, if the number of workmen present in the field is too great, productivity will decrease instead of increasing. There will not be, for example, enough tools for all; two workmen will be cultivating the same area and will obstruct each other or will not agree on the manner of proceeding. Taking into account the new strategic and managerial environment and technical projections, we find ourselves somewhat in this situation, since each individual can “cultivate” a greater piece today than yesterday.

In fact, we are surrounded today by an environment in which individual performance, put at the service of the collective, is appreciated much more than before. The progress made in communication technologies allows the transfer and dissemination of much more important data or information than before. It is easier to develop relations between partners and actors who contribute to the same goal or who can make an improvement in the service. The borders of organizations become at the same time fuzzier, since their activity can be divided, since others contribute in an essential way to achieving the result. Consequently, some tend to concentrate on their core activity and to give up tasks to service providers, while others modify or diversify their business portfolios. Thus, an automobile manufacturer will subcontract certain specialized parts to concentrate on the development of the final assembly of the models. Thus, supermarkets advertise holiday packages or propose bank credits in addition to their traditional activities.

The military is also included in this vast movement as interest in externalization of all projects testifies, as illustrated by our increasingly large

involvement in security missions. An aviator can no longer be regarded only as a combatant who takes part directly or indirectly in air warfare. As the example of the United States shows, some in Iraq, for instance, take part in the total war effort by leading missions on the ground, taking part in the protection of convoys or installations. The professional identity of each is recomposed today very quickly according to the general environment and the choices that the commander orders.

At the same time, the rise of the mean level of training and competence of individuals sustains the development of initiative and of decentralization. The personnel of today comprehend situations more easily and can work out specific solutions, starting from local recognition of the problem and general knowledge. These changes affect the roles of the chain of command, one of which could be in the future to take a more active part in the development of competencies of their subordinates and to better coordinate their various initiatives.

I believe that we touch here on the objective of transformation for our personnel. It is a question of passing from a culture in which the person in charge decided the field of freedom that would be given to subordinates with another system of values, to one in which the latter have true autonomy, thanks to which they can exploit the initiative appropriate to their level but where their chiefs have the means of limiting their freedom when considered necessary. We are of course far from this state currently. We are, in fact, in the middle of the ford, and some yield readily to their traditional reflexes by prohibiting certain actions, by constraining their subordinates a little too strictly.

Naturally, I am not in favor of promoting a “horizontal” organization; the lack of coordination would make such an organization ineffective in any case. The recent mishaps of a famous, very powerful bank point out the risks which we incur if we evolve without limits. Neither is it the time anymore for a strictly vertical model of defense organization but for us to find together the good slope, which must allow the full development of each individual and the best possible effectiveness of the Air Force.

To follow a road, to adopt a process of change, as we see, is not an easy matter to achieve. But the road is nothing if it does not lead toward a place recognized and understood by all; it hardly has interest if one does not understand where it leads. This destination, this goal, this end state must be defined specifically, with my direction, by the doctrinal concept of the Air Force.

When one speaks to me about this famous doctrinal concept of the Air Force, its tribulations in our history, especially recently, I think of Shakespeare's *Much Ado about Nothing*. Many explanations were advanced to try to explain the turmoil of the Air Force in this field. The most rigorous academic work in this area is that of Etienne de Durand and Bastien Irondelle, entitled *Air Strategy Compared: France, the United States, the United Kingdom*, published in the collection of the documents of the *Centre d'Études en Sciences Sociales de la Défense*. It deserves your attention.

This document, the doctrinal concept, will initially be useful, as it specifies the missions for which the Air Force is designed. That can appear obvious, but it is not certain that everyone has exactly the same answer to this question. After all, several specialties comprise the Air Force. Some among us exploit the resources offered by the atmosphere to lead a military action, while others use the infosphere to support it. Sometimes air commandos fight valorously on the ground and ensure under extreme conditions the final guidance of precision bombs while other aviators arm themselves in the air terminals within the framework of *Vigipirate* [France's national security alert plan] missions. Which unit can perform all these missions? And how to position us compared to the other services, whose contribution is as essential as ours for our defense?

Our doctrinal concept should answer these questions and others. It will be a public document which will expose choices clearly and make it possible for all members of our organization to adopt a common vision for finally acting with the same goal. It will contribute, I hope, to maintaining the cohesion of our organization by giving the same reference marks and the same direction to each individual.

But it is more than a doctrinal concept. It is also a text placed at the disposal of observers or external decision makers which clarifies for them how an entity adapts to the mission it is given. It is also a document of communication and popularization. It presents a vision that others can acquire and compare with theirs. All can comment on it, criticize it, and take part in its evolution. This point appears essential to me. A doctrinal concept must be revisable and be discussed so that all enlightened opinions are taken into account to improve it or to adapt it to a new context. I thus hope that this text will cause debates, discussions, and positive criticisms within our organization but also in the various defense forums. Many platforms exist, each of which can be seized to put forward reactions. The review *Penser les Ailes Françaises*³ is one, but other free exchanges also exist.

The important thing is a healthy reflection. Let us look on the other side of the Atlantic, because the history of the USAF is worthy of study. Strategic air thought was strongly blocked in the beginning of the 1960s by the preeminence of the Strategic Air Command and the preparation for a future nuclear war. All plans were elaborated according to this possibility. American aviators were going to pay dearly for the very expensive choice in Vietnam of using a tool badly designed for the tactical challenges encountered there. On the other hand, reflection was encouraged after the war, and from debates on very high-quality ideas, which were going to take root throughout the American defense establishment. There were certainly failures, as in Grenada, but there would be especially a great victory in Iraq in 1991. The war was not only won in the Iraqi skies, it was also won thanks to the pens of hundreds of officers and commentators (Israeli, for example) who drew from their cultures, who wondered about the manner of fighting other armies, who shared their doubts, their experiments, and their convictions. The intellectual combat of today can thus avoid the military disappointments of tomorrow.

Our doctrinal concept must avoid, in my opinion, two principal traps. The first is our natural tendency to be too technical. We are likely in this case to be incomprehensible and to limit the diffusion of our ideas to only our institution. In addition, our propensity to consider problems mainly through a technological perspective harms us seriously. We are situated within a political scope; we are employed to achieve political ends. What we must express in a doctrinal concept is the way in which we are integrated in this political project, or failing this, how we can contribute to the realization of a political project.

The other trap that I identify at this stage is our sometimes marked tendency to want to act in an autonomous way. This is rather natural but can cause some disadvantages. A vision of the strategic use of airpower is essential. The air campaign over Kosovo proved that the military use of only the air component could, in certain specific crisis situations, be sufficient to overcome certain obstacles. This good example of air diplomacy should appear in a forthcoming work, which Mr. Coutau-Bégarie has prepared on this topic.

Another interesting case involves the Luftwaffe during the Second World War, which had adopted only one tactical and operational approach. It excelled in these fields, as its performances proved during the invasion of Russia, but it paid a steep price when unable to match the industrial war

effort of the British and Soviets and, finally, to stop the successive waves of Anglo-Saxon bombers over the territory of the Third Reich.

If I believe it is useful to think about the autonomous use of the air component in a military framework or broader policy, I am, however, convinced that this approach is not enough. We must also question ourselves on the use of the air weapon in collaboration with the other components, whether it is at the tactical, operational, or strategic level. The operations carried out every day by our units in Afghanistan point out the relevance of these modes of action. Thus, we must think of the division of labor between the services, or rather, of the integration of their actions.

If we want to further improve our performance within the framework of an air-land battle, two things will be necessary. The first will be that of reflection—to imagine the best means of collaborating, to know how to supplement the action of the other, thanks to our own capabilities. It will be essential that each service can derive benefits from the others if we want such a collaboration to be viable.

The second will be that of acculturation, because the idea is useless if not permitted to be implemented. The presence of pilots experienced in units of the Special Forces or terrestrial units could thus appreciably improve joint modes of action. They could be employed as advanced air traffic controllers and could have the role of systematically managing the air assets allocated according to the situation on the ground. They would have the expertise necessary to know what an aircraft can or cannot do. They could propose original solutions with their brothers in arms, which could perhaps integrate more easily their ideas of the contribution of operating in the third dimension. On the other hand, they would at the same time learn during their assignments the spirit and the constraints of engagements from the surface perspective.

Complementary solutions can be considered, like the systematic installation of joint command posts managing tactical-level fires through the means allocated to them. There still exists, in reflection, a freedom in which each of us can be motivated to imagine the future. Besides, other fields are largely unexplored, such as the way the Air Force could take part in the investment in exoatmospheric space, cyberspace, or the world of communication, which are all within the competence of the joint services and political authorities. The use of drones remains also a source of very stimulating ideas.

Our transformation will continue in the future, just as it has in our past. Our Air Force personnel must engage the new ideas, anticipate the requirements of the future, and find ways to improve our contribution to national security. The White Paper and our doctrinal concept represent first steps on this journey. Where they will take us depends on the dedication and creativity of our personnel. **SSQ**

Notes

1. An English translation of the Defence White Paper appears at http://www.ambafrance-uk.org/New-French-White-Paper-on-defence.html#sommaire_3.
2. The CESA Web page is at http://www.cesa.air.defense.gouv.fr/article.php3?id_article=363.
3. English translations are available at http://www.cesa.air.defense.gouv.fr/rubrique.php3?id_rubrique=61.